3-Penny Fidget Spinner

Kit contains:

- spinner template
- corrugated cardboard
- 3 pennies
- Chicago screw
- tiny straw piece

You will need: scissors, liquid glue, a sharp pencil, a hole punch (if you have one), and coloring supplies.

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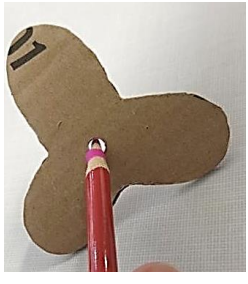
INSTRUCTIONS

Step 1. Cut out your spinner template.

Step 2. Trace the spinner shape onto the cardboard and cut it out. (Ask an adult if you need an assist.)

Step 3. Make a hole in the center of the spinner with a hole punch or sharp pencil. If you use a pencil, be sure to flatten any sticky-outy cardboard bits.



Step 4. Thread the straw piece onto the tip of the pencil. Use the pencil to poke the straw into the middle of the hole in your spinner. This will decrease **friction** for improved spinning.

Step 5. Glue the pennies onto the spinner as shown.

Step 6. Let the glue dry. Yes, waiting is the hardest part.

Step 7. Thread the screw and post halves of the Chicago screw through the straw. Decorate if desired.

Now you're ready to spin!

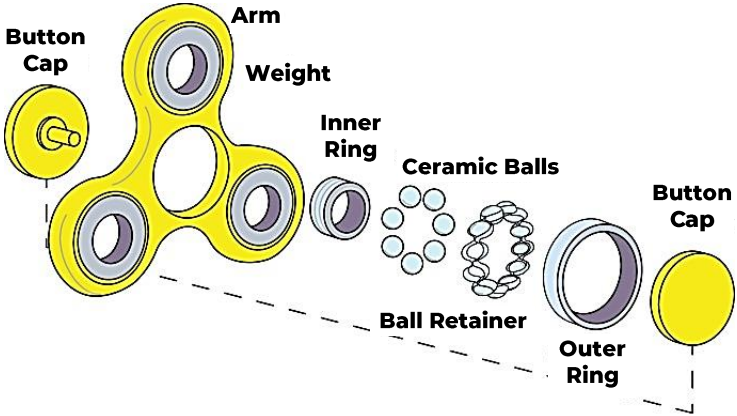
WHAT'S IN A PENNY?

Modern pennies are made of copper-plated zinc. They weigh 2,500 grams and are 19.05 millimeters in diameter. Pennies are 1.52 millimeters thick... unless they get run over by a train. Then they look more like this.

Spinner template:
redtedart.com/wp-content/uploads/2017/05/
Free-Fidget-Spinner-DIY-templates.pdf

HOW DO THEY WORK?

Commercial fidget spinners rotate around a central axis formed by two rings. Sandwiched between the rings are a series of ball bearings. Have you ever stepped on a ball and gone sliding way faster than you expected? That's basically what ball bearings do: these tiny balls decrease the friction between the rings as the spinner rotates for better slidiness.



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